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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,601	02/12/2004	Guo-Liang Yu	PF160D3	3691

22195 7590 09/22/2006

HUMAN GENOME SCIENCES INC.  
INTELLECTUAL PROPERTY DEPT.  
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ROCKVILLE, MD 20850

EXAMINER
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JOYCE, CATHERINE

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/776,601

Applicant(s)

YU ET AL.

Examiner

Catherine M. Joyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,8,10-12,14,15 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1,8,10-12,14,15 and 19-26 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1, 8, 10-12, 14, 15, 19-26 are pending, and are subject to a restriction requirement.
2. Applicants response and amendment filed June 26, 2006 in response to the restriction requirement in the paper mailed May 26, 2006 is acknowledged and has been entered. After review and reconsideration, the previously mailed restriction requirement is withdrawn and the below stated restriction requirement is issued in lieu thereof.

### ***Election/Restrictions***

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  1. Claim 1, as drawn to an isolated polynucleotide shown in Figures 1, 3-7, and 11-13, classified in class 536, subclass 23.1.
  2. Claim 8, and 19-26, as drawn to a polypeptide encoded by a human gene shown in Figures 1, 3-7, and 11-13, classified in class 530, subclass 300.
  3. Claim 10, as drawn to an antibody against a polypeptide encoded by a human gene shown in Figures 1, 3-7, and 11-13 classified in class 530, subclass 387.1.
  4. Claim 11, as drawn to a compound which inhibits the activation of a polypeptide encoded by a human gene shown in Figures 1, 3-7, and 11-13, classified in class 514, subclass 1.
  5. Claim 12, as drawn to a method for the treatment of a patient having need to inhibit a colon specific gene protein comprising administering to the patient a compound which inhibits the activation of a polypeptide encoded

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by a human gene shown in Figures 1, 3-7, and 11-13, classified in class 514, subclass 1.

6. Claim 14, as drawn to a method for the treatment of a patient having need of a colon specific gene protein comprising administering to the patient a polypeptide encoded by a human gene shown in Figures 1, 3-7, and 11-13, classified in class 424, subclass 184.1.
7. Claim 15, as drawn to a process for diagnosing a disorder of the colon in a host comprising determining transcription of a human gene in a sample derived from non-colon tissue of a host, said gene having a coding portion which includes DNA having at least 90% identity to DNA selected from the group consisting of the DNA of Figures 1-13, classified in class 435, subclass 4.

4. The inventions are distinct, each from the other, because of the following reasons:

The inventions of groups 1-4 are drawn to materially distinct products with different structures and functions. Searching any of the inventions 1-4 together would pose an undue search burden because the searches would entail searches of different databases, such as, for example, polypeptides in polypeptide databases and polynucleotides in polynucleotide databases. The inventions of groups 3-7 are drawn to materially distinct methods that differ with respect to method steps, reagents employed and populations targeted. While the searches for the methods of groups 3-7 would be overlapping, they would not be coextensive. Thus, searching any of the inventions of groups 3-7 together would pose an undue search burden. The inventions of groups 1, 2, and 4 are related to the inventions of groups 7, 6, and 5, respectively, as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be

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used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the products as claimed in groups 1, 2, and 4, can be used in materially distinct processes such as hybridization assays, affinity chromatography, or in vitro assays, respectively.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Further, the following election of species are required.

If group 1 or 7 is elected, election of a specific polynucleotide from the following list is required: the polynucleotide of Figure 1, the polynucleotide of Figure 3, the polynucleotide of Figure 4, the polynucleotide of Figure 5, the polynucleotide of Figure 6, the polynucleotide of Figure 7, the polynucleotide of Figure 11, the polynucleotide of Figure 12, the polynucleotide of Figure 13.

If group 2, 3, 4, 5, or 6 is elected, election of a specific polypeptide from the following list is required: a polypeptide encoded by the polynucleotide of Figure 1, a polypeptide encoded by the polynucleotide of Figure 3, a polypeptide encoded by the polynucleotide of Figure 4, a polypeptide encoded by the polynucleotide of Figure 5, a polypeptide encoded by the polynucleotide of Figure 6, a polypeptide encoded by the polynucleotide of Figure 7, a polypeptide encoded by the polynucleotide of Figure 11, a polypeptide encoded by the polynucleotide of Figure 12, and a polypeptide encoded by the polynucleotide of Figure 13.

7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP 809.02(a).

8. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103 of the other invention.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

11. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

12. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or**

**otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine M. Joyce whose telephone number is 571-272-3321. The examiner can normally be reached on Monday thru Friday, 10:15 - 6:45.

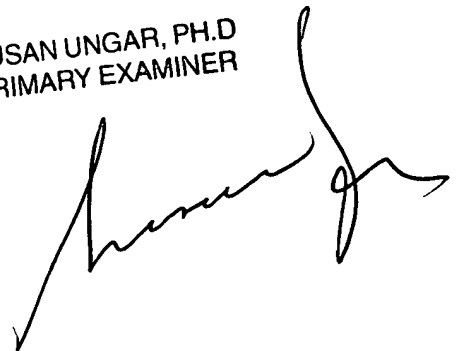
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Catherine M. Joyce  
Examiner  
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SUSAN UNGAR, PH.D  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Susan Ungar', is written over the printed name and title.